

Some notes about species of the genus *Palearctia* FERGUSSON, 1984

(Lepidoptera, Arctiidae)

by

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Summary: The taxonomic status of the following species of this genus is given: *Palearctia gratiosa sergei* DUBATOLOV, 1996 syn. nov. of *P. glaphyra aksuensis* (O. BANG-HAAS, 1927); *Palearctia erschoffi miranda* PLUSTSCH & DOLIN, 2000 syn. nov. of *P. gracilis gracilis* DUBATOLOV, 1996; *Palearctia gracilis arcana* PLUSTSCH & DOLIN, 2000 comb. nov.; *Palearctia sussamyra* DUBATOLOV, 1996 comb. nov.; *Palearctia turkestanica* DUBATOLOV, 1996 comb. nov. The male genitalia of the species *Palearctia gracilis arcana* PLUSTSCH & DOLIN, *Palearctia sussamyra* DUBATOLOV, 1996, *Palearctia turkestanica* DUBATOLOV, 1996 are presented for the first time. The females of *Palearctia gracilis arcana* PLUSTSCH & DOLIN, 2000, *Palearctia sussamyra* DUBATOLOV, 1996, and *Palearctia turkestanica* DUBATOLOV, 1996 are described.

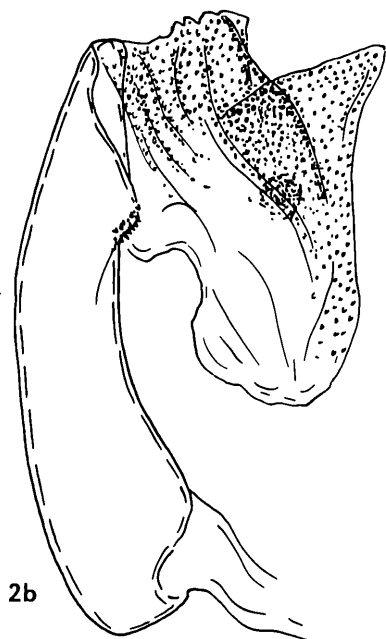
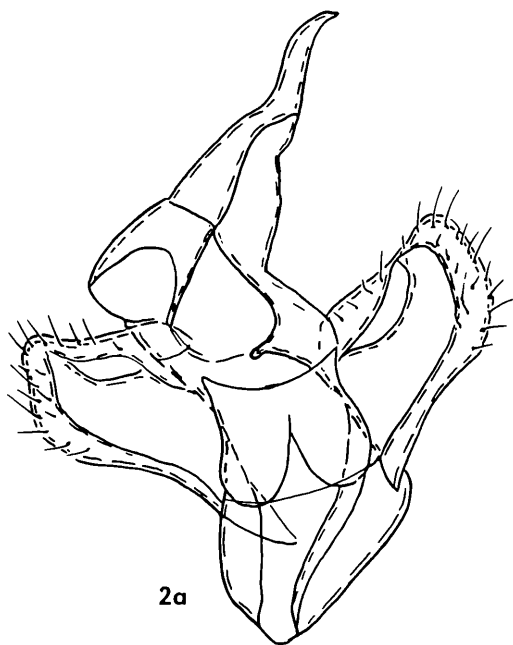
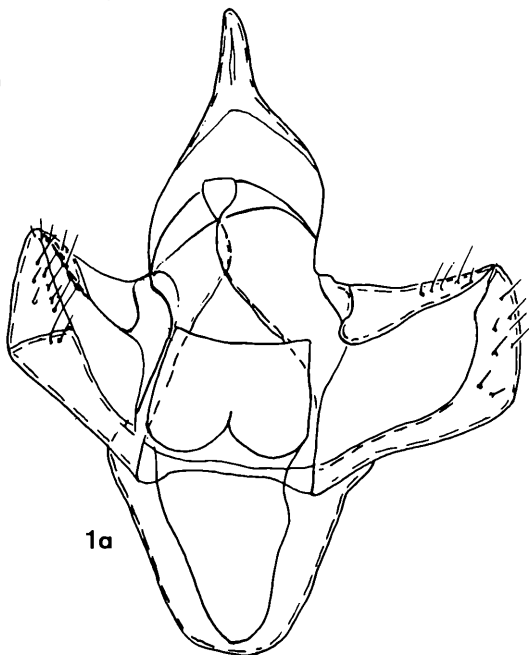
Introduction

Published data (DUBATOLOV, 1987) and the revision of the genus *Palearctia* (DUBATOLOV, 1996) has greatly increased interest in these tiger moths. After publication of that revision, several other works have been published including descriptions of new taxa (KAUTT, 1996; DE FREINA, 1997; SALDAITIS, IVINSKIS & CHURKIN, 2000; PLUSTSCH & DOLIN, 2000). These publications again induced entomologists to gather new data.

DUBATOLOV singled out new taxa on the basis of very scarce data, i. e. one or two specimens. Since the species of the genus *Palearctia* are very variable, it is very difficult to define the status of a taxon on the basis of the available material.

During the last several years we managed to accumulate abundant data and to use abundant data collected by T. WITT and S. CHURKIN. In addition, we managed to get females of most species that had been unknown. Thus we were able to define the status of some taxa more precise. In this work we mostly deal with species of the complex of *Palearctia ferghana-gracilis*.

In his revision, DUBATOLOV (1996) describes *Palearctia gratiosa sergei* as subsp. nov. from Terskei Ala-Tau. Most of the known taxa of *Palearctia gratiosa* are distributed more to the west than the described taxon. This fact has induced us to investigate this taxon more thoroughly. We managed to find topotypes (specimens that are not included into the type series, but which were collected at the same time, in the same place and by the same collector). We have at our disposal 4 specimens (3 ♂♂ and 1 ♀). Out of them 2 ♂♂ (leg. S. K. SAZONOV) (SE of the Terskei Ala-Tau, 6 km upstream of the Molo gorge, 12 km of the Kuilyu river (Sary-Dzhaz tributary), one of them was found on 18.VII.1984 at the height of 3700 m, whereas the other on 19.VII.1984 at the height of 3500 m (col. pl. Vb, fig. 2). They possess yellow hindwings and the pattern of the forewings slightly resembles the pattern of the forewings of *Palearctia gratiosa*. However, their genitalia are typical to *P. glaphyra* (fig. 1). Two other individuals found in the same locality and by the same collector (♂ caught on 18.VII.1984 at the height of 3700 m (col. pl. VI, fig. 1);



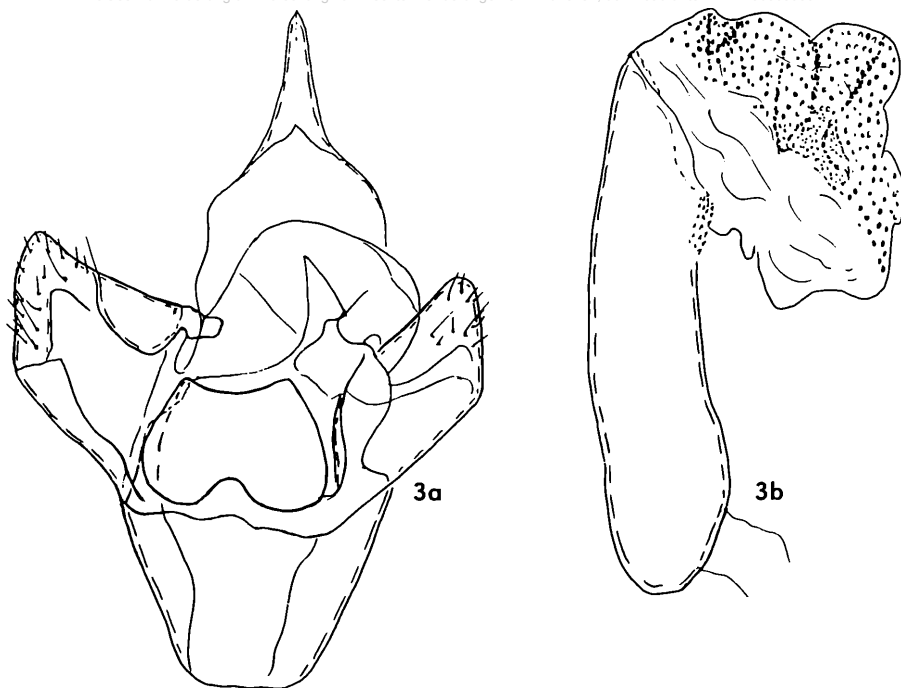


Fig. 1: Male genitalia of *Palearctia glaphyra aksuensis* O. BANG-HAAS (= *Palearctia gratiosa sergei* DUBATOLOV); a – genitalia ventral view; b – aedeagus.

C. Tian-Shan, E. Terskey-Alatau, 3700 m, valey of the river Molo, 18.VII.1984, SAZONOV S. K. (label in Russian).

Fig. 2: Male genitalia of *Palearctia glaphyra aksuensis* O. BANG-HAAS (= *Palearctia gratiosa sergei* DUBATOLOV); a – genitalia ventral view; b – aedeagus.

C. Tian-Shan, E. Terskey-Alatau, 3700 m, valey of the river Molo, 18.VII.1984, SAZONOV S. K. (label in Russian).

Fig. 3: Male genitalia of *Palearctia glaphyra aksuensis* O. BANG-HAAS; a – genitalia ventral view; b – aedeagus.

C. Tian-Shan, Kajandy mtr., Tashkoro vill. env., MACHAT leg. 6.VII.1984 (label in Russian).

♀ caught on 19.VII.1984 at the height of 3250 m (col. pl. VI, fig. 5) do not differ externally from *P. glaphyra aksuensis* (O. BANG-HAAS, 1927), a species peculiar to that region, and they have typical genitalia of *P. glaphyra* males (fig. 2). For comparison, we present the genitalia of a typical *P. glaphyra aksuensis* male (fig. 3; col. pl. VI, figs 2, 3). In addition, we present genitalia of *Palearctia gratiosa flava* DUBATOLOV, 1996 male, which possesses the typical form of the valve of *P. gratiosa* (fig. 4) and distinctly differs from the taxon described by DUBATOLOV (*Palearctia gratiosa sergei* DUBATOLOV, 1996). Thus we consider that *Palearctia gratiosa sergei* DUBATOLOV, 1996 is *P. glaphyra aksuensis* (O. BANG-HAAS, 1927 **syn. nov.** In T. WITT's collection among the specimens of *Palearctia gratiosa sergei* DUBATOLOV is one male from Kirghizia, env.

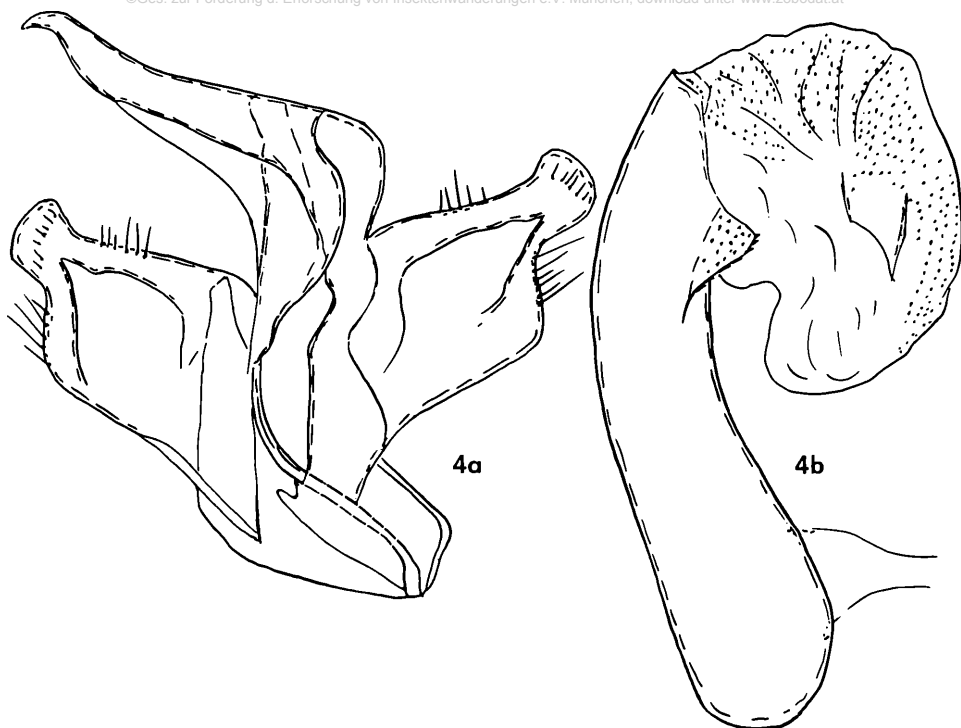


Fig. 4: Male genitalia of *Palearctia gratiosa* STAUDINGER genitalia ventral view; b aedeagus.

S. W. Kirgizstan, Matcha Mts. (Turkestan Mts.), Ak-Terek r., Noo-Dzhailo vall., 3200–3500 m, 10.–17.VII.1999, A. PETROV leg.

Baranon pass, 11.–18.VII.1991, leg M. KOPP (col. pl. Vb, fig. 1). The locality “Baranon pass” is unknown to us and without the examination of its genitalia it is impossible to determine its exact taxonomic status. However, most likely, it is *P. glaphyra* ab. *flava* O. BANG-HAAS. We have an externally identical specimen in our collection.

In his revision, DUBLATOV (1996) describes *Palearctia ferghana turkestanica* DUBATOLOV, 1996 subsp. nov. (col. pl. VI, figs 15, 19) from a male (Tadzhikistan, Turkestan, mountain range, the Shakhristan pass, 16.VII.1980 leg. PRASOLOV). In T. WITT’s museum, there is a series of *Palearctia ferghana turkestanica* from five different localities containing males and females (2 ♂♂, Tajikistan, Sachristan, VIII.1991, leg. BOUMA; 3 ♂♂, 4 ♀♀, Asia ctr., Tadjikistan, Turkes. chrebet, 8.–10.VIII.1990, coll. SCHINTLMEISTER; 1 ♂, 1 ♀, Zaravshan Ridge, Pamiro-Alaj, 3000–3500 m, Tadjuk-UdSSR, 2.–14.VIII.1990; 1 ♂, Uzbekistan, Alai-Gebirge, 42 km s Fergana Umg., VIII.1991; 8 ♂♂, 7 ♀♀, Uzbekistan, Chamzabad (–Schachimardan), 42 km südl. Ferghana, 1600–2000 m, 20.VI.1989, leg. GANSON). The belonging of the females to this species is un-

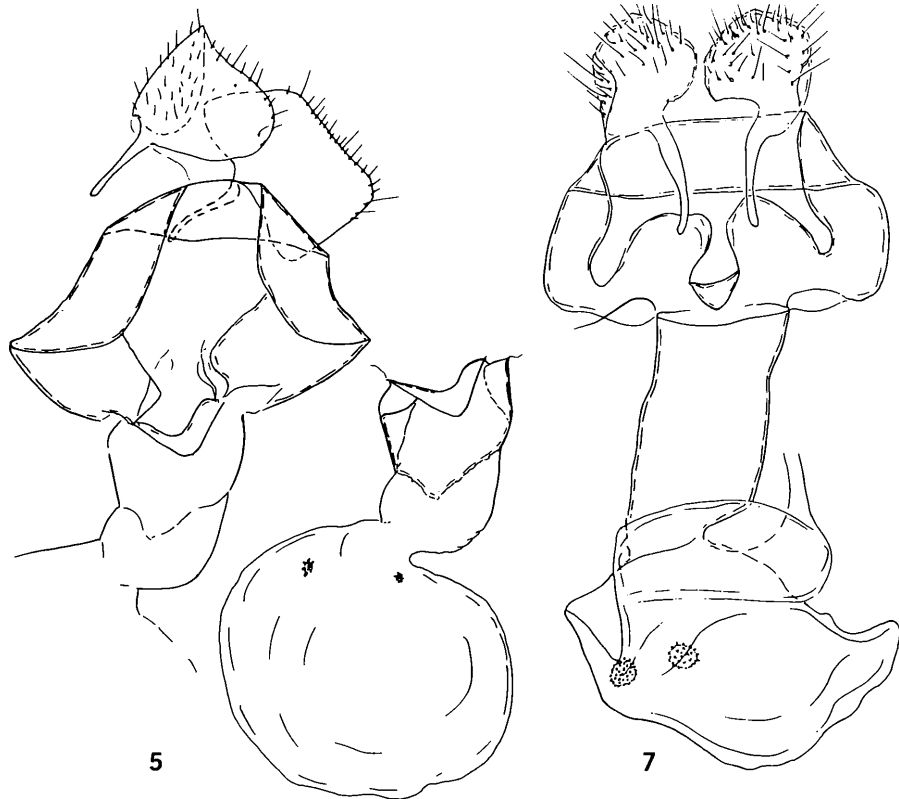


Fig. 5: Female genitalia of *Palearctia turkestanica* DUBATOLOV
Asia centr., Tadjikistan, 8.–10.VII.1990, coll. SCHINTELMEISTER, Museum WITT.

Fig. 7: Female genitalia of *Palearctia sussamyra* DUBATOLOV
Kyrgyzstan, Tian-Shan, Mts. Talasskij-Alatau, fauc. cavi montis Kara-Bura, alt., 3100–3350 m,
20.VII.2000, O. Novikov leg.

questionable, since the whole one series from one locality is raised from the larva. Since the females of this species have been unknown until recently, we give a brief description.

The wings are partially reduced, measuring 10–12 mm in length. The forewings are yellowish-whitish without any pattern, with a sharp black discal spot. The hindwings are pinkish with an indistinct black discal spot; the margin of the wing with a few black spots. The anal lobes of the genitalia are very broad; the ventral wall of the ductus bursae is sclerotised; the ductus bursae is short, wide; the bursa with two signa of uneven size (fig. 5).

Because DUBATOLOV (1996) in his description did not describe the genitalia structures of the males, we give a description here. The valva narrow; obtuse, uncus short, the upper part of the

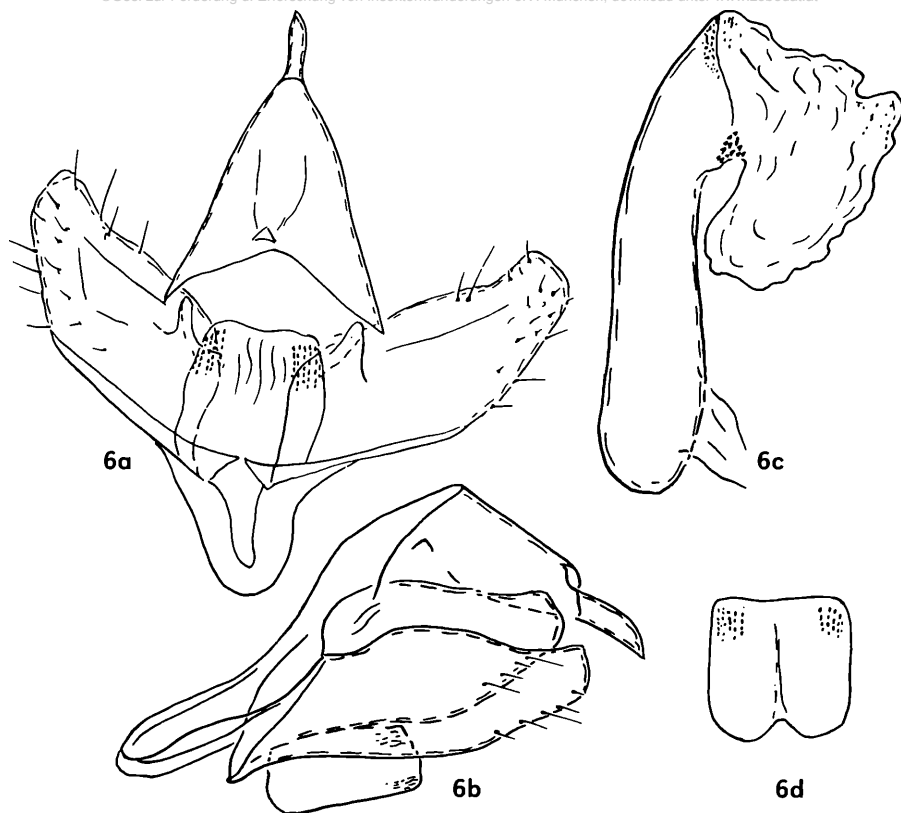


Fig. 6: Male genitalia of *Palearctia turkestanica* DUBATOLOV; a – genitalia without aedeagus (ventral view); b – genitalia dorsal view; c – aedeagus; d – juxta.
 Asia centr., Tadjikistan, 8.–10.VII.1990, coll. SCHINTELMEISTER, Museum WITT.

juxta is even, with groups of fine spines on the sides; aedeagus is of the typical form to the genus (fig. 6).

Basing on the appearance of the females (reduced wings, specific pattern; smaller size) and on the structure of the genitalia of the males (narrow valva, short uncus, and form of juxta), we consider that this is a separate species *Palearctia turkestanica* DUBATOLOV, 1996 **comb. nov.** For comparison, we present the drawing of male genitalia of *P. ferghana* STGR., 1887 (fig. 16) and the photographs of the imago of both sexes (col. pl. Vb, figs 3, 4).

DUBATOLOV (1996) in his revision describes *Palearctia ferghana sussamyra* subsp. nov. (col. pl. VI: 16, 23) from one male (Kirghistan, Susamyr range, Alabel pass, 3300 m 14.VII.1977 leg. MURZIN). During recent years, quite a great number of specimens of this species has been collected from various locations (Kirghistan, Talassky mts., Kara-Bura pass, Kirghistan, Chatkal

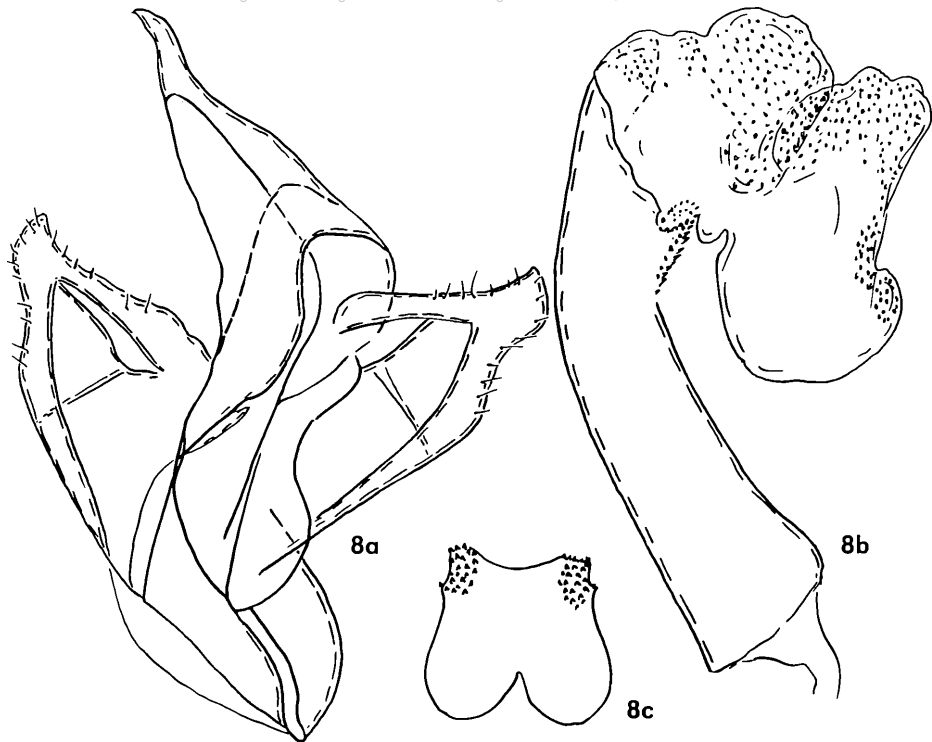


Fig. 8: Male genitalia of *Palearctia sussamyra* DUBATOLOV; a – genitalia without aedoeagus (ventral view); b – aedoeagus; c – juxta.
Kirgyzkij mtr., Con-Kurcak river, 14.VII.1999, h–3200 m.

mts., Chanach pass, Kirghistan, Fergansky mts., Bergut pass). These specimens allow us to define the status of this taxon more exactly. The females of this species have been unknown, so we present a brief description. The females possess well-developed wings, which do not differ very much from the wings of the males. The difference is determined in the form of the antennae. The pattern of the forewing is peculiar to the genus, with the pattern made of black, brown and white transverse and longitudinal bands. The length of the wing is 13 mm. The hindwings vary from light pinkish to intensive red, with a black discal spot; the apical margin of the wing is black, turning into a large, submarginal spot. Other submarginal spots are large and black. The genitalia structures of the females are with small lobes; the ductus bursae is wide, unsclerotised; the ductus seminalis emerges from the bulla on the upper part of the bursa. The signa are similar (fig. 7). The genitalia of the males are variable. The form of the valve of individuals from different geographical localities differs in the width of the underlying part and the form of the cucullus. The form of the juxta and the sclerotisation has small spines

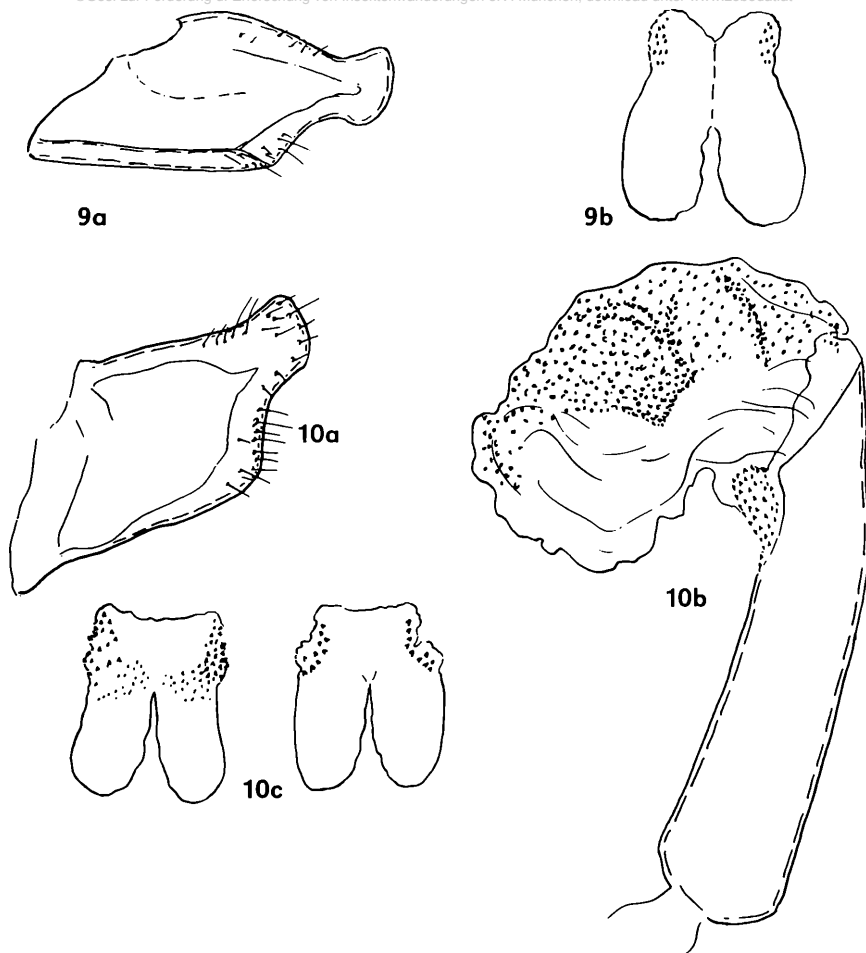


Fig. 9: Male genitalia of *Palearctia sussamyra* DUBATOLOV; a - right valva; b - juxta. Kyrgyzstan, Talassky Rg. Mt. Kara-Bura pass, 3300 m, 30.VII.1999.

Fig. 10: Male genitalia of *Palearctia sussamyra* DUBATOLOV; a - right valva; b - aedoeagus; c - juxta of two separate specimen.

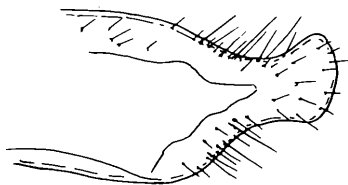
Kirgizstan, Chatkal Mts., Chanach Pass, 3200-3600 m, 11.-12.VII.2001, S. CHURKIN leg.

Fig. 11: Male genitalia of *Palearctia sussamyra* DUBATOLOV; a - right valva; b - aedoeagus; juxta.

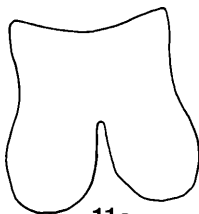
Kyrgyzstan, Fergansky Rg. Mt. Bergut pass, 3000 m, 24.VII.1999, DOLIN leg.

Fig. 12: Male genitalia of a paratype of *Palearctia erschoffi miranda* PLUSTSCH & DOLIN (= *Palearctia gracilis gracilis* DUBATOLOV); a - genitalia ventral view; b - aedoeagus.

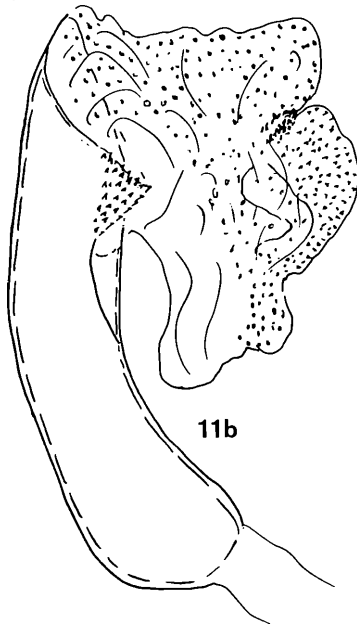
Kyrgyzstan, Talass Rg., Plateau Kara-Bura, 2500 m, 1.-3.VIII.1999, DOLIN & ANDREEVA leg.



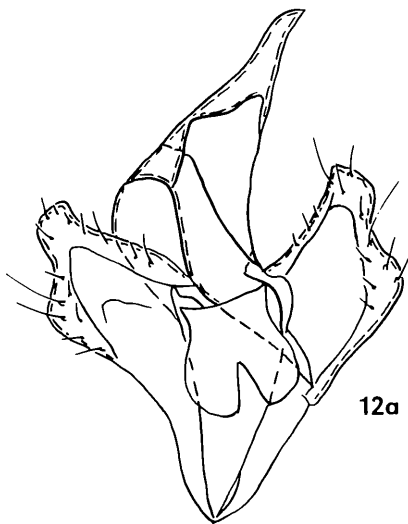
11a



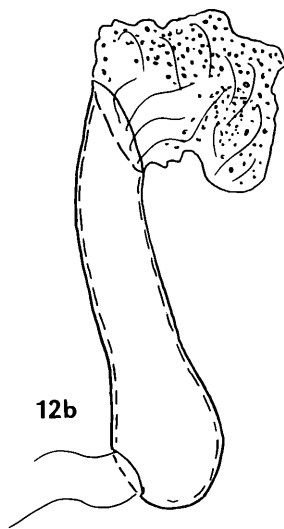
11c



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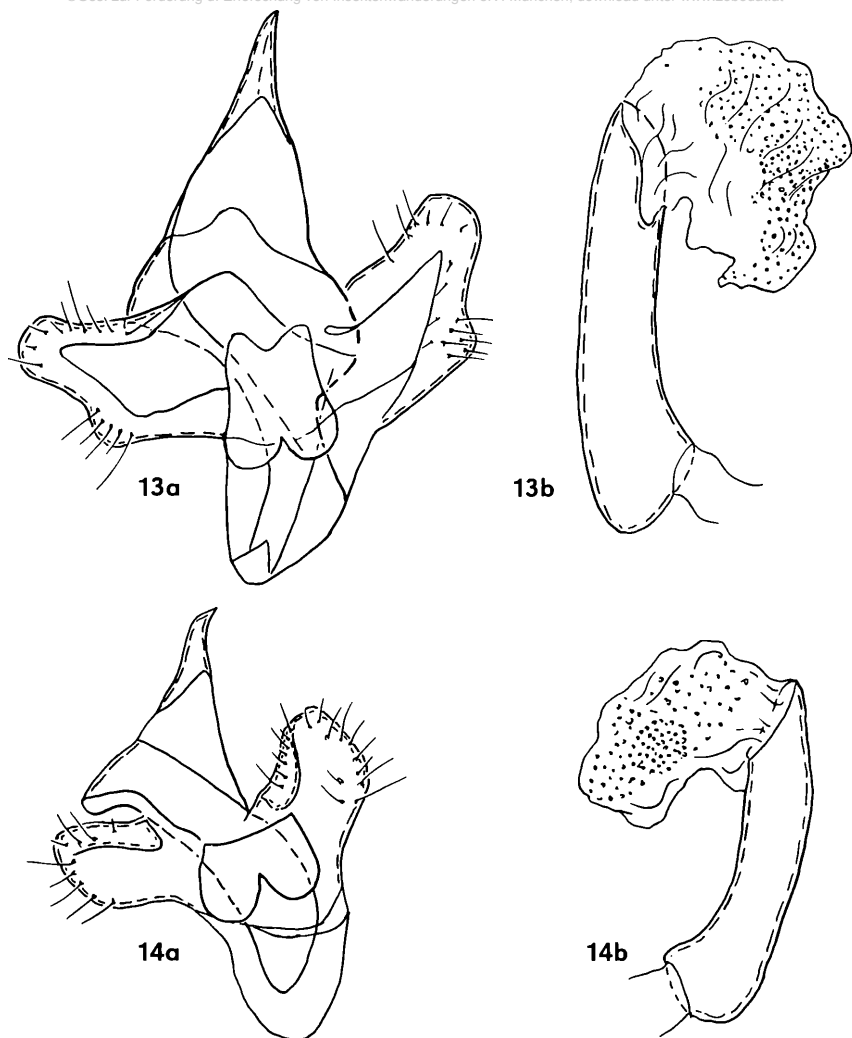


Fig. 13: Male genitalia of *Palearctia gracilis gracilis* DUBATOLOV; a - genitalia ventral view; b - aedeagus.

Kirgizstan, Chatkal mts., Sary Chelek, Aflatun, 2.VIII.1998.

Fig. 14: Male genitalia of *Palearctia erschoffi* ALPHERAKI; genitalia ventral view; b aedeagus.

Tian-Shan, Kajandi mt. r., Tashkoro vill., 3400 m, 1.-11.VII.1988., L. SCHERNYSHOV leg. (label in Russian).

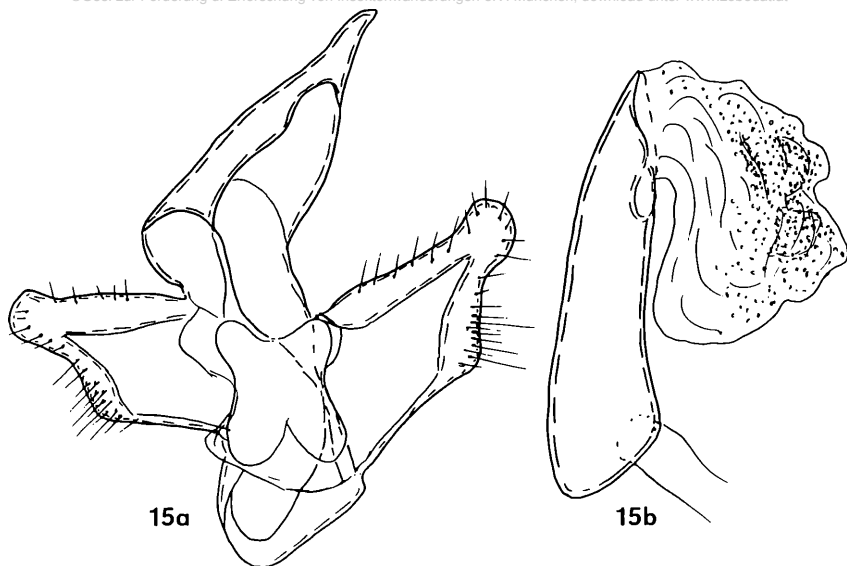


Fig. 15: Male genitalia of *Palearctia gracilis arcana* PLUSTSCH & DOLIN; a – genitalia ventral view; b – aedeagus.

Kyrgyzstan, Tian-Shan, Mts. Kyrgyzskij, fauc. cavi montis, Tjoo-Ashuu (= Tjuz-Ashuu), alt. 3150–3300 m, E. RUTJAN leg.

on top or is without such spines (figs 8–11). The analysis of the genitalia structures of the *P. ferghana* at hand (fig. 16; col. pl. Vb, figs 3, 4) (form of the valve, juxta) and external differences of both species (the pattern of the forewings; hindwings without a discal spot or such one very much reduced; submarginal spots very small) allows us to raise *Palearctia sussamyra* DUB., 1996 species level (**stat. nov.**). The investigated individuals from different mountain ranges distinguish in a great external variability of the males and their genitalia, due to which there are some doubts about the final status of this taxon.

PLUSTSCH & DOLIN (2000) described *Palearctia erschoffi miranda* (Kirghistan, Talasskij Ala-Tau Mts., Kara-Bura pass., 2500–2600, leg. RUTJAN). They based their description of this taxon only on external features. The obtained paratypes differ neither in appearance (col. pl. VI, figs 12, 17) nor in genitalia (fig. 12 from *Palearctia gracilis* DUB., 1996 (col. pl. VI, figs 9–11, 13, 21) (fig. 13). Thus, we may maintain that the described taxon must be synonymised with *Palearctia gracilis gracilis* DUBATOLOV, 1996 (*Palearctia erschoffi miranda* PLUSTSCH & DOLIN, 2000 **syn. nov.**). For comparison we present male genitalia of *P. erschoffi* ALFERAKI, 1882 (fig. 14) (different form of the valve; genitalia are much smaller) and a photograph of the imago (col. pl. VI, fig. 22). *P. erschoffi* females (col. pl. Vb, figs 5, 6) have normally developed wings, and by that feature they differ distinctly from *P. gracilis* females (col. pl. VI, fig. 18), which have reduced wings and a different pattern of forewings. PLUSTSCH & DOLIN (2000) described and depicted in

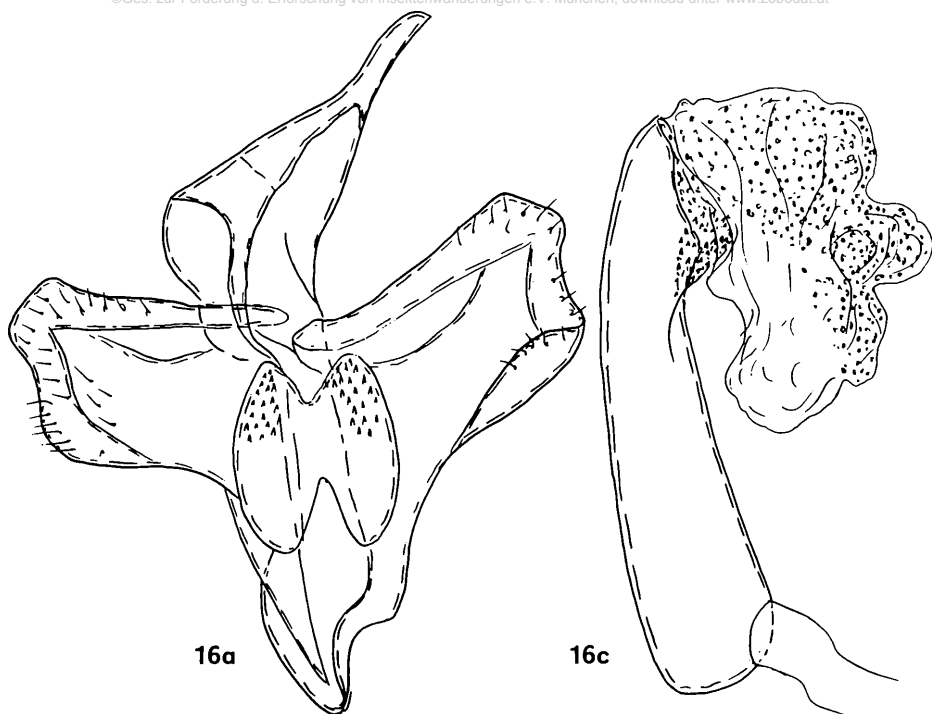


Fig. 16: Male genitalia of *Palearctia ferghana* STAUDINGER; a genitalia ventral view; b aedeagus.
UdSSR, Usbekische SSR, Alaiski Chrebet, Chamsaabad, 02.VII.1986, 3000 m, leg. PETER SALK Berlin.

their article the female of *P. gracilis gracilis* DUB. for the first time, which is erroneously presented as *P. erschoffi miranda*. However, there are several *Palearctia gracilis arcana* females from Kyrgyzstan, Talaaskii Mt. R., Alabel pass., identical in appearance with the described *P. erschoffi miranda* subsp. nov. (= *P. gracilis gracilis*) Kyrgyzstan, Tien-Shan Occ., Mts. Talaasskij-Alatau, fluv. Kara-Bura. It might be that the authors (PLUSTSCH & DOLIN) made a mistake and the taxon described by them should belong to *Palearctia gracilis arcana* and if this is true, the status of the above-mentioned taxon should be changed. *P. gracilis gracilis* individuals obtained in Talaskij Kara-Bura (col. pl. VI, figs 12, 17) and Chandalash mts. Chekmak-su riv. (col. pl. VI, fig. 11) have slightly more intensive red hindwings than specimens from the nominative site (Chatkal Mts.), but there are individuals among them identical to topotypical specimens.

PLUSTSCH & DOLIN (2000) described *Palearctia erschoffi arcana* PLUSTSCH & DOLIN (Kirghystan, Kirghyskij mts. 8 km W. Tjuz-Aschu pass, 3100 m, 06.VIII.1999, leg I. G. PLUSTSCH). They based

their description only on the external features of the specimen. We investigated a series of topotypical specimens (Kirghystan, Kirghyskij mts. 8 km W. Tjuz-Aschu pass, 3150–3300 m, 12.–15.VII.2000, leg. RUTJAN) (col. pl. VI, figs 4, 8; fig. 15) and other specimens (Kirghystan, Suusamyrl Mts., fauc. Cavi mts. Kyrghyz, 3050–3200 m, 30.–31.VII.2000 leg. RUTJAN) (Kirghystan, Suusamyrl valley, Alabel pass, 3100 m, 10.VI.1999, leg. MOSCHENNIKOV) (col. pl. VI, figs 14, 18) and determined that this taxon is not *P. erschoffi* (according to the genitalia of the males and the appearance of the females), but *P. gracilis*. The form of the valve, juxta and aedoeagus of the above-mentioned taxon are close to *P. gracilis gracilis*. The females of both taxa are externally identical (the dark yellow wings are reduced; the pattern resembles that of the *P. gracilis gracilis* female). *Palearctia erschoffi* distinctly differs from the earlier-mentioned taxon in male genitalia (less than half the size; the valve is broad and not narrowing toward the top) and in the appearance of the females (normally developed wings; the pattern of the wing is similar to that in the males). We assume that morphological differences (forewings with a reduced black pattern; absence of the black discal spot on hindwings; marginal spots reduced) and the exclusiveness of the locality allows us to consider this taxon as *Palearctia gracilis arcana* PLUSTSCH & DOLIN, 2000 **comb. nov.**

PLUSTSCH & DOLIN (2000) mention in their article *P. erschoffi* ssp.? (Kyrgyzskij Mts., Karakastek, 10.VIII.1986, A. ZDANKO leg.). We have in our collection a specimen actually from the same locality (Kirgizskiy Mts., 30 km S. from Merke, Sandyk v., 3200 m, 6.VIII.1998, leg. ZHDANKO A.), externally very similar to the above-mentioned specimen. The analysis of the genitalia structures allows us to attribute the specimen mentioned by PLUSTSCH & DOLIN to the taxon *Palearctia gracilis arcana*.

DUBATOLOV (1996) presents *P. ferghana variabilis* (DANIEL, 1966) and *P. ferghana mustangbhoti* (DANIEL, 1961) in his revision as subspecies of *Palearctia ferghana*. On the basis of DANIEL's descriptions we consider that they are valid species, i. e. *Palearctia variabilis* DANIEL, 1966 and *P. mustangbhoti* DANIEL, 1961.

Due to the lack of information and having no possibility to carry out the studies on the genitalia, we cannot judge about the belonging of *Palearctia schottlaenderi* (STRAND, 1912) to *P. ferghana*.

Acknowledgements

We sincerely thank Mr. T. WITT for his help and for the possibility to use his collection. We also thank Mr. S. CHURKIN for his geographical consultations and valuable data. We also thank Mr. S. SAZONOV, Mr. S. A. TOROPOV, Mr. T. ZUBATCHIKAS and Mr. J. AUGUSTAUSKAS for their help.

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Explanation of colour plate Vb (p. 233) (Foto T. WITT):

Fig. 1: *Palearctia glaphyra* ab. *flava*? O. BANG-HAAS

U.S.S.R., 3400–3600 m, Kirghizia, env. Baranon Pass, 11.–18.VII.1991, leg. M. KOOP, coll. WITT.

Fig. 2: *Palearctia glaphyra aksuensis* O. BANG-HAAS

Asia ctr., Kirghizia, Ala Tau, Terskey, Tal des Fluss Molo, 3500 m, 19.VII.1984, coll. L. BIEBER, coll. WITT.

Fig. 3: *Palearctia ferghana* STAUDINGER

Asia centralis, USSR, Uzbekistan, Alajskij chrebet, 4200 m, 12.VII.1986, K. L. KRUSEK leg., coll. WITT.

Fig. 4: *Palearctia ferghana* STAUDINGER

UdSSR, Usbekische SSR, Alaiski Chrebet, Chamsaabad, 3000 m, 2.VII.1986, leg. PETER SALK, Berlin, coll. WITT.

Fig. 5: *Palearctia erschoffi* ALPHERAKI

Ala Tau, G. RÜCKBEIL, coll. F. DANIEL, coll. WITT.

Fig. 6: *Palearctia erschoffi* ALPHERAKI

Ala Tau, G. RÜCKBEIL, coll. F. DANIEL, coll. WITT.

1	2	
3	4	
5	6	

Explanation of colour plate VI (p. 235):

Fig. 1: *Palearctia glaphyra aksuensis* O. BANG-HAAS

Centr. Tian-Shan, E. Terskej-Alatau, 3700 m, val. of the r. Molo, 18.VII.1984, S. K. SAZONOV (label in Russian).

Fig. 2: *Palearctia glaphyra aksuensis* O. BANG-HAAS

Centr. Tian-Shan, Kajandy mtr., 3200 m, Tashkoro vill. env., leg. Machat, 12.VII.87 (label in Russian).

Fig. 3: *Palearctia glaphyra aksuensis* O. BANG-HAAS

Kajandy-Katta mts., 5 km W. vill. Tashkoro, 3200 m, 28.VI.1988, leg. BOGDANOV.

Fig. 4: *Palearctia gracilis arcana* PLUTTSCH & DOLIN

Kyrgyzstan, Tian-Shan, Mts. Kyrgyzskij, fauc. cavi montis, Tjoo Ashun (= Tjuz-Ashun), alt. 3150–3300., E. RUTJAN leg., 30–31.VII.2000.

Fig. 5: *Pleolarctia glaphyra aksuensis* O. BANG-HAAS
Centr. Tian-Shan, E. Terskej-Alatau, 3250 m, val. of the r. Molo, 19.VII.
1984, S. K. SAZONOV (label in Russian).

Fig. 6: *Pleolarctia glaphyra aksuensis* O. BANG-HAAS
Kyrgyzstan, Moldotoo, Dolon Pass, 3200 m, 29.VII.96, W. DOLIN.

Fig. 7: *Pleolarctia glaphyra manni* ALPHERAKI
China, 3300–3500 m, Boro Horo Shan, 90 km Balcuntay city, 9.VII.–
12.VII.1996.

Fig. 8: *Pleolarctia gracilis arcana* PLUSTSCH & DOLIN
Kyrgyzstan, Kyrgyzski Rg. Mt., env. Tju-Ashu pass, 2900–3100 m, 26.VII.
2000 Novikov.

Fig. 9: *Pleolarctia gracilis gracilis* DUBATOLOV
Kirgizstan, Chatkal Mts., Chanach Pass, 3200–3600 m, 11.–12.VII.
2001, S. CHURKIN leg.

Fig. 10: *Pleolarctia gracilis gracilis* DUBATOLOV
Kirgizstan, Chatkal Mts., Chanach Pass, 3200–3600 m, 11.–12.VII.2001, S. CHURKIN leg.

Fig. 11: *Pleolarctia gracilis gracilis* DUBATOLOV
W. Tian-Shan, Chandalash Mts., Chakmak-Su r., 2800 m, 15.–18.VII.2000, K. KOLESNICHENKO
leg.

Fig. 12: Paratypus of *Pleolarctia erschoffi miranda* PLUSTSCH & DOLIN (= *Pleolarctia gracilis
gracilis* DUBATOLOV)
Tian-Shan occ., Mts. Talaaskij-Alatau, fluv. Kara-Bura, alt. 2500–2600 m, 1.–3.VIII.1999, F. RUT-
JAN leg.

Fig. 13: *Pleolarctia gracilis gracilis* DUBATOLOV
Chatkal Mts., Sary-Chelek L., Aflatum, Sary-Chelek r., 3200 m, 2.VIII.1998.

Fig. 14: *Pleolarctia gracilis arcana* PLUSTSCH & DOLIN
Kyrgyzstan, Talaaskii Mt. R. Alabel pass., h 3100., 10.VI.99., leg. S. MOSCHENNIKOV.

Fig. 15: *Pleolarctia turkestanica* DUBATOLOV
Asia Centr., Tadjikistan, 8.–10.VII.1990, coll. SCHINTELMEISTER, Museum WITT.

Fig. 16: *Pleolarctia sussamyra* DUBATOLOV
Kyrgyzstan, Talaaskii Mt. R. Alabel pass., h 3100., 10.VI.99., leg. S. MOSCHENNIKOV.

Fig. 17: Paratypus of *Pleolarctia erschoffi miranda* PLUSTSCH & DOLIN ssp. n., (= *Pleolarctia
gracilis gracilis* DUBATOLOV)
Kyrgyzstan, Talass Rg., Plateau Kara-Bura, 2500 m., 1.–3.VIII.1999, DOLIN, ANDREEVA leg.

Fig. 18: *Pleolarctia gracilis arcana* PLUSTSCH & DOLIN
Kyrgyzstan, Talaaskii Mt. R. Alabel pass., h 3100., 10.VI.99., leg. S. MOSCHENNIKOV.

Fig. 19: *Pleolarctia turkestanica* DUBATOLOV
Asia Centr., Tadjikistan, 8.–10.VII.1990, coll. SCHINTELMEISTER, Museum WITT.

Fig. 20: Paratypus of *Pleolarctia rasa* SALDAITIS, IVINSKIS & CHURKIN
China, Xin Jiang, Karlik mount., 3300 m, 85 km North-East of Hami city, 20.–30.VI.98.

Fig. 21: *Pleolarctia gracilis gracilis* DUBATOLOV
W. Tian-Shan, Chandalash Mts., Chakmak-su r., 2300–2700 m, 14.–17.VII.2000, A. KLIMENKO
leg.

Fig. 22: *Pleolarctia erschoffi* ALPHERAKI
Kirgizia, Kaindy ran., 15.VII.1996, h–2500 m.

1	5	9
2	6	10
3	7	11
4	8	12
13	17	21
14	18	22
15	19	23
16	20	24

Fig. 23: *Palearctia sussamyra* DUBATOLOV

Kyrgyzstan, Talaaskii Mt. R. Alabel pass., h 3100., 10.VI.99., leg. S. MOSCHENNIKOV.

Fig. 24: *Palearctia sarycola* DE FREINA

E. Pamir, Sarykolsky Mts., lake Dunkel'dyk, leg. V. TITOV.

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Colour plate Va

DEVYATKIN, A. L. & A. L. MONASTYRSKII: HesperIIDae of Vietnam 12. A further contribution to the HesperIIDae fauna of North and Central Vietnam (Lepidoptera, HesperIIDae). *Atalanta* **33** (1/2): 137–155.

Fig. 1: *Capila lineata irregularis* subsp. nov., holotype ♂, Central Vietnam, Pu Hoat Nature Reserve, 17.V.1999, FRONTIER leg., upperside.

Fig. 2: Id., underside.

Fig. 3: *Seseria dohertyi salex* EVANS, 1949, ♂, Central Vietnam, Bach Ma National Park, 13.VII. 1996, A. L. MONASTYRSKII leg., upperside.

Fig. 4: Id., underside.

Fig. 5: *Abraximorpha davidii elfina* EVANS, 1949, ♂, Central Vietnam, Quang Binh Province, Minh Hoa district, vic. of Yen Hop village, 5.IV.1999, A. L. DEVYATKIN leg., upperside.

Fig. 6: *Abraximorpha esta* EVANS, 1949, ♂, Type, Tonkin, Ngai-Tio, 4800 ft., 31.V.1924, H. STEVENS leg., upperside.

Fig. 7: *Pithauria linus* EVANS, 1949, ♂, North Vietnam, Ben En National Park, 27.VII.1997, FRONTIER leg., underside.

Fig. 8: *Pithauria stramineipennis* WOOD-MASON & DE NICEVILLE, ♂, North Vietnam, Cuc Phuong National Park, 14.VI.1997, A. L. MONASTYRSKII leg., underside.

Fig. 9: *Parnara batta* EVANS, 1949, ♂, North Vietnam, Lao Cai Province, Hoang Lien Nature Reserve, 24.VIII.1998, VU VAN LIEN leg., upperside.

Fig.10: Id., underside.

1	3	5
2	4	6
7	8	9
		10

Colour plate Vb

SALDAITIS, A. & P. IVINSKIS: Some notes about species of the genus *Paelearctia* FERGUSSON, 1984 (Lepidoptera, ArctIIDae). – *Atalanta* **33** (1/2): 157–172.

Fig. 1: *Paelearctia glaphyra* ab. *flava*? O. BANG-HAAS

U.S.S.R., 3400–3600 m, Kirghizia, env. Baranon Pass, 11.–18.VII.1991, leg. M. KOOP, coll. WITT.

Fig. 2: *Paelearctia glaphyra aksuensis* O. BANG-HAAS

Asia ctr., Kirghizia, Ala Tau, Terskey, Tal des Fluss Molo, 3500 m, 19.VII.1984, coll. L. BIEBER, coll. WITT.

Fig. 3: *Paelearctia ferghana* STAUDINGER

Asia centralis, USSR, Uzbekistan, Alajskij chrebet, 4200 m, 12.VII.1986, K. L. KRUSEK leg., coll. WITT.

Fig. 4: *Paelearctia ferghana* STAUDINGER

UdSSR, Usbekische SSR, Alaiski Chrebet, Chamsaabad, 3000 m, 2.VII. 1986, leg. PETER SALK, Berlin, coll. WITT.

Fig. 5: *Paelearctia erschoffi* ALPHERAKI

Ala Tau, G. RÜCKBEIL, coll. F. DANIEL, coll. WITT.

Fig. 6: *Paelearctia erschoffi* ALPHERAKI

Ala Tau, G. RÜCKBEIL, coll. F. DANIEL, coll. WITT.

1	2	
3	4	
5	6	

Colour plate Va/Vb



Colour plate VI

SALDAITIS, A. & P. IVINSKIS: Some notes about species of the genus *Paelearctia* FERGUSSON, 1984 (Lepidoptera, Arctiidae). – *Atalanta* **33** (1/2): 157–172.

Fig. 1: *Paelearctia glaphyra aksuensis* O. BANG-HAAS – Centr. Tian-Shan, E. Terskej-Alatau, 3700 m, val. of the r. Molo, 18.VII.1984, S. K. SAZONOV (label in Russian).

Fig. 2: *Paelearctia glaphyra aksuensis* O. BANG-HAAS – Centr. Tian-Shan, Kajandy mtr., 3200 m, Tashkoro vill. env., leg. Machat, 12.VII.87 (label in Russian).

Fig. 3: *Paelearctia glaphyra aksuensis* O. BANG-HAAS – Kajandy-Katta mts., 5 km W. vill. Tashkoro, 3200 m, 28.VI.1988, leg. BOGDANOV.

Fig. 4: *Paelearctia gracilis arcana* PLUSTSCH & DOLIN – Kirgyzstan, Tian-Shan, Mts. Kyrgyzskij, fauc. cavi montis, Tjoo Ashun (= Tjuz-Ashun), alt. 3150–3300., E. RUTJAN leg., 30–31.VII.2000.

Fig. 5: *Paelearctia glaphyra aksuensis* O. BANG-HAAS – Centr. Tian-Shan, E. Terskej-Alatau, 3250 m, val. of the r. Molo, 19.VII.1984, S. K. SAZONOV (label in Russian).

Fig. 6: *Paelearctia glaphyra aksuensis* O. BANG-HAAS – Kirgyzstan, Moldotoo, Dolon Pass, 3200 m, 29.VII.96, W. DOLIN.

Fig. 7: *Paelearctia glaphyra manni* ALPHERAKI – China, 3300–3500 m, Boro Horo Shan, 90 km Balcuntay city, 9.VII.–12.VII.1996.

Fig. 8: *Paelearctia gracilis arcana* PLUSTSCH & DOLIN – Kirgyzstan, Kirgyzskij Rg. Mt., env. Tju-Ashu pass, 2900–3100 m, 26.VII.2000 NOVIKOV.

Fig. 9: *Paelearctia gracilis gracilis* DUBATOLOV – Kirgizstan, Chatkal Mts., Chanach Pass, 3200–3600m, 11.–12.VII.2001, S. CHURKIN leg.

Fig. 10: *Paelearctia gracilis gracilis* DUBATOLOV – Kirgizstan, Chatkal Mts., Chanach Pass, 3200–3600 m, 11.–12.VII.2001, S. CHURKIN leg.

Fig. 11: *Paelearctia gracilis gracilis* DUBATOLOV – W. Tian-Shan, Chandalash Mts., Chakmak-Su r., 2800 m, 15.–18.VII.2000, K. KOLESNICHENKO leg.

Fig. 12: Paratypus of *Paelearctia erschoffi miranda* PLUSTSCH & DOLIN (= *Paelearctia gracilis gracilis* DUBATOLOV) – Tian-Shan occ., Mts. Talaaskij-Alatau, fluv. Kara-Bura, alt. 2500–2600 m, 1.–3.VIII.1999, F. RUTJAN leg.

Fig. 13: *Paelearctia gracilis gracilis* DUBATOLOV – Chatkal Mts., Sary-Chelek L., Aflatum, Sary-Chelek r., 3200 m, 2.VIII.1998.

Fig. 14: *Paelearctia gracilis arcana* PLUSTSCH & DOLIN – Kirgyzstan, Talaaskii Mt. R. Alabel pass., h 3100., 10.VI.99., leg. S. MOSCHENNIKOV.

Fig. 15: *Paelearctia turkestanica* DUBATOLOV – Asia Centr., Tadjikistan, 8.–10.VII.1990, coll. SCHINTELMEISTER, Museum WITT.

Fig. 16: *Paelearctia sussamyra* DUBATOLOV – Kirgyzstan, Talaaskii Mt. R. Alabel pass., h 3100., 10.VI.99., leg. S. MOSCHENNIKOV.

Fig. 17: Paratypus of *Paelearctia erschoffi miranda* PLUSTSCH & DOLIN ssp. n., (= *Paelearctia gracilis gracilis* DUBATOLOV) – Kirgyzstan, Talass Rg., Plateau Kara-Bura, 2500 m., 1.–3.VIII.1999, DOLIN, ANDREEVA leg.

Fig. 18: *Paelearctia gracilis arcana* PLUSTSCH & DOLIN – Kirgyzstan, Talaaskii Mt. R. Alabel pass., h 3100., 10.VI.99., leg. S. MOSCHENNIKOV.

Fig. 19: *Paelearctia turkestanica* DUBATOLOV – Asia Centr., Tadjikistan, 8.–10.VII.1990, coll. SCHINTELMEISTER, Museum WITT.

Fig. 20: Paratypus of *Paelearctia rasa* SALDAITIS, IVINSKIS & CHURKIN – China, Xin Jiang, Karlik mount., 3300 m, 85 km North-East of Hami city, 20.–30.VI.98.

Fig. 21: *Paelearctia gracilis gracilis* DUBATOLOV – W. Tian-Shan, Chandalash Mts., Chakmak-su r., 2300–2700 m, 14.–17.VII.2000, A. KLIMENKO leg.

Fig. 22: *Paelearctia erschoffi* ALPHERAKI – Kirgizia, Kaindy ran., 15.VII.1996, h–2500 m.

Fig. 23: *Paelearctia sussamyra* DUBATOLOV – Kirgyzstan, Talaaskii Mt. R. Alabel pass., h 3100., 10.VI.99., leg. S. MOSCHENNIKOV.

Fig. 24: *Paelearctia sarycola* DE FREINA – E. Pamir, Sarykolsky Mts., lake Dunkel'dyk, leg. V. TITOV.

1	5	9
2	6	10
3	7	11
4	8	12
13	17	21
14	18	22
15	19	23
16	20	24

Colour plate VI

